

What is claimed is:

1. A speed change ratio control unit for a continuously variable transmission which converts input rotation into output rotation in continuously changing speed manner through controlling a step motor as a driving actuator for a speed change control valve is characterized in comprising:

an input rotation detection means for detecting said input rotation;

an output rotation detection means for detecting said output rotation;

an actual speed change ratio calculation means that calculates actual speed change ratio from said input rotation detected and said output rotation detected;

a step-out determination means which compares a step position (**ASTP**) of said step motor stored by said speed change ratio control unit and a step position (**BSTP**) of said step motor corresponding to said calculated actual speed change ratio at every predetermined operation cycle, and if **ASTP=BSTP** is satisfied determines that a step-out has occurred on said step motor;

a step-out correction means that when a step-out is determined by said step-out determination means corrects said **ASTP** so as to reduce a difference between said **ASTP** and **BSTP**; and

a drive means for said driving step motor using said corrected **ASTP**.

2. The speed change ratio control unit for a continuously variable transmission according to claim 1, wherein said step-out determination means is characterized in determining a step-out of said step motor when a step-out determination condition that hydraulic pressure is in a state capable of realizing a speed change ratio corresponding to a step position (ASTP) of said step motor stored in said speed change ratio control unit is satisfied, on an occasion of step-out determination.

3. The speed change ratio control unit for a continuously variable transmission according to claim 1, wherein said step-out determination means is characterized in determining a step-out of said step motor when a step-out determination condition that an alteration of the speed change ratio is a predetermined value or less is satisfied, on an occasion of step-out determination.

4. The speed change ratio control unit for a continuously variable transmission according to claim 1, wherein said step-out determination means is characterized in determining a step-out of said step motor when a step-out determination condition that acceleration or deceleration is a predetermined value or less is satisfied, on an occasion of step-out determination.

5. The speed change ratio control unit for a continuously variable transmission according to claim 1, wherein said step-out determination means is characterized in determining a step-out

of said step motor when a step-out determination condition that braking is not being operated is satisfied, on an occasion of step-out determination.

5 6. The speed change ratio control unit for a continuously variable transmission according to claim 1, wherein said step-out determination means is characterized in determining a step-out of said step motor when a step-out determination condition that a lever is not being operated by a driver is satisfied, on an
10 occasion of step-out determination.

7. The speed change ratio control unit for a continuously variable transmission according to claim 1, wherein said determination means is characterized in making said determination
15 when all conditions set forth in claims 2 to 6 are satisfied.